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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/444,488

11/19/1999

LUC VANTALON

5442-020

8716

7590

05/07/2004

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EXAMINER

SHELEHEDA, JAMES R

ART UNIT

PAPER NUMBER

2614

7
DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/444,488

Applicant(s)

VANTALON ET AL.

Examiner

James Sheleheda

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 33-42 is/are pending in the application.
- 4a) Of the above claim(s) 19-32 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 and 39-42 is/are allowed.
- 6) ☒ Claim(s) 33 and 36 is/are rejected.
- 7) ☒ Claim(s) 34, 35, 37 and 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-18 and 33-42 in Paper No. 5 is acknowledged.

Claims 19-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

Drawings

2. The drawings are objected to because page 27, lines 10-14, of the specification states that if a byte is unscrambled the SCR bit is set to 0. Figure 23, decision block 120, states that if the byte is unscrambled, the SCR bit is set to 1. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 33 is rejected under 35 U.S.C. 102(e) as being anticipated by Williams et al. (Williams) (6,157,411).

As to claim 33, Williams discloses a digital signal receiving system (Fig. 1) comprising:

an input channel for receiving a digital data stream (column 3, lines 64-67 and column 4, lines 1-12) which carries digital television signals (satellite and digital broadcasting; column 3, lines 64-67 and column 4, lines 1-12), wherein the data is transmitted in one of a plurality of different digital transmission formats;

transmission format converter circuitry (data parser, 204; Fig. 2) for converting the incoming data stream (DSS stream, 235; column 4, lines 45-50) into a transmission format independent set of digital television signals (column 5, lines 62-67 and column 6, lines 1-5);

and a television display mechanism (television monitor, 102) for converting the transmission format independent digital television signals into a visual image (wherein the signals are taken from memory and displayed to a user; column 8, lines 8-14).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams in view of Matthews III (Matthews) (5,874,985).

As to claim 36, Williams discloses a digital signal receiving system (Fig. 1) comprising:

at least two an input channels for receiving at least two digital data streams (column 3, lines 64-67 and column 4, lines 1-12), one of which carries digital television signals (satellite and digital broadcasting; column 3, lines 64-67 and column 4, lines 1-12), wherein each data stream is transmitted in one of a plurality of different digital transmission formats;

transmission format converter circuitry (data parser, 204; Fig. 2) for converting each incoming data stream (column 4, lines 45-50) into a transmission format independent set of digital television signals (column 5, lines 62-67 and column 6, lines 1-5);

and a television display mechanism (television monitor, 102) for converting the transmission format independent digital television signals into a visual image (wherein the signals are taken from memory and displayed to a user; column 8, lines 8-14).

While Williams discloses receiving and converting a plurality of digital signals, he fails to specifically disclose digital message signals and a message processing mechanism for converting the message signals into user perceivable messages.

In an analogous art, Matthews discloses a digital cable receiver (Fig. 2, 20; column 3, lines 63-67 and column 4, lines 1-4) which receives digital message signals

(column 5, lines 44-55) on a different channel from the television signals (column 6, lines 30-37) and converts the digital messages for display to a viewer (column 6, lines 44-53) for the benefit of allowing the transmitting of messages to a subscriber regardless of what the subscriber is currently viewing (column 2, lines 65-67 and column 3, lines 1-5).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Williams system to include the use of digital message signals and a message processing mechanism for converting the message signals into user perceivable messages, as taught by Matthews, for the benefit of providing the user of a digital receiver with the ability to receive and view digital messages regardless of the source.

Allowable Subject Matter

1. Claims 34, 35, 37 and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

2. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1-7 are allowable because the prior art fails to teach or disclose a method for enabling a conditional access module to handle any of a plurality of data transport streams, comprising: qualifying received data bytes according to their positions and

values within a data packet; and attaching a multi-bit tag to **each** received data byte, such tag containing information required for further processing of the byte.

Claims 8-16 are allowable because the prior art fails to teach or disclose a system for enabling a conditional access module to handle any of a plurality of data transport streams, comprising: a qualification mechanism for qualifying received data bytes according to their positions and values within a data packet; and a tagging mechanism for applying a multi-bit tag to **each** received data byte, such tag containing information required for further processing of the byte.

Claim 17 is allowable because the prior art fails to teach or disclose a mechanism for enabling a conditional access module to handle any of a plurality of data transport streams, comprising: a qualifying mechanism for receiving and qualifying received data bytes according to their positions and values within a data packet; and a tagging mechanism for assigning a multi-bit tag to **each** data byte, such tag having a value determined by the results of the qualifying process performed by the qualifying mechanism.

Claim 18 is allowable because the prior art fails to teach or disclose a method for handling any of a plurality of data transport streams, comprising: qualifying received data bytes according to their positions and values; and attaching a tag to **each** qualified data byte.

Claim 39 is allowable because the prior art fails to teach or disclose a system for receiving a plurality of different digital data transport stream formats, comprising: a qualifying mechanism for receiving and qualifying incoming data bytes according to their positions and values in their plural-byte data packets; a tagging mechanism for assigning a plural-bit tag to **each** data byte, such tag having a value determined by the results of the qualifying process performed by the qualifying mechanism, and a signal processing mechanism responsive to the tagged data bytes for producing digital information signals.

Claims 40-41 are allowable because the prior art fails to teach or disclose a mechanism for receiving a plurality of different digital data transport stream formats, comprising: a qualifying mechanism for receiving and qualifying incoming data bytes according to their positions and values in their plural-byte data packets, and a tagging mechanism for assigning a plural-bit tag to **each** data byte, such tag having a value determined by the results of the qualifying process performed by the qualifying mechanism.

Claim 42 is allowable because the prior art fails to teach or disclose a mechanism for receiving a plurality of different digital data transport stream formats wherein the data is conveyed in multi-byte data packets with each packet having a plural-byte header field and a plural-byte payload field, comprising: a first testing

mechanism for examining **each** incoming data byte and determining whether the byte is a header byte or a payload byte, a first tagging mechanism coupled to the first testing mechanism for assigning header byte indicative tags to header field data bytes and payload indicative tags to payload field data bytes, a second testing mechanism for examining each incoming data byte and determining whether the data is scrambled, a second tagging mechanism coupled to the second testing mechanism for assigning a scramble condition tag bit to each **data** byte and giving such bit one binary value if the data is scrambled and the other binary value if the data is not scrambled, and signal transfer circuitry for transferring each data byte and its assigned tag bits to a data processing mechanism for producing usable digital information.

A background search found similar prior art, however, not completely as claimed.

For example, Williams et al. (6,157,411) discloses a method to analyze and convert a plurality of received transport formats into another "sourceless" format. Williams et al. fails, however, to specifically disclose qualifying received data bytes and attaching multi-bit tags to each byte.

Temple (EP0880277A2) discloses a receiver which will receive signals in two formats and perform conversion so one only signal type is output. Temple fails, however, to disclose qualifying received data bytes and attaching multi-bit tags to each byte.

Conclusion

3. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

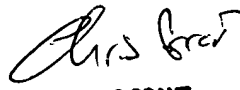
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (703) 305-8722. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the primary examiner, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Sheleheda
Patent Examiner
Art Unit 2614

JS


CHRIS GRANT
PRIMARY EXAMINER